

SUPPLEMENTAL REQUIREMENTS

Please provide the following information:

Date of Submission: _____

Company Name: _____

Contact Name: _____

Contact Email: _____

Product Name: _____

Dimensions (width x height): _____

Primary Material: _____

In order for a bus shelter to be placed within NCDOT Right of Way, a North Carolina Licensed Professional Engineer must seal, sign and date, verifying the following information:

1. The bus shelter is correctly designed to withstand a maximum design wind velocity of _____ mph. (Reference the wind zone map on the following page – ASCE 7.10 Figure 26.51A Basic Wind Speeds.)
2. The bus shelter (considered to be a rigid, partially enclosed building) is correctly designed to resist all applicable loads in accordance with ASCE/SEI 7: *Minimum Design Loads for Buildings and Other Structures*.
3. The main wind force resisting system (MWFRS) for the bus shelter is correctly designed in accordance with the *AASHTO Standard Specifications for Structural Support for Highway Signs, Luminaires and Traffic Signals*.

As a Licensed Professional Engineer in the state of North Carolina, I verify the three statements noted above.

*As part of the encroachment process, the site specific soil conditions of each bus shelter within NCDOT Right of Way must be evaluated by a Professional Engineer licensed in the state of NC to verify that the foundation is designed according to current AASHTO or ACI requirements. Additionally, as a minimum, the bus shelter foundation and connections must satisfy the manufacturer’s recommendations.



Seal of NC Licensed PE

ASCE 7.10 Figure 26.5.1A
 Basic Wind Speeds

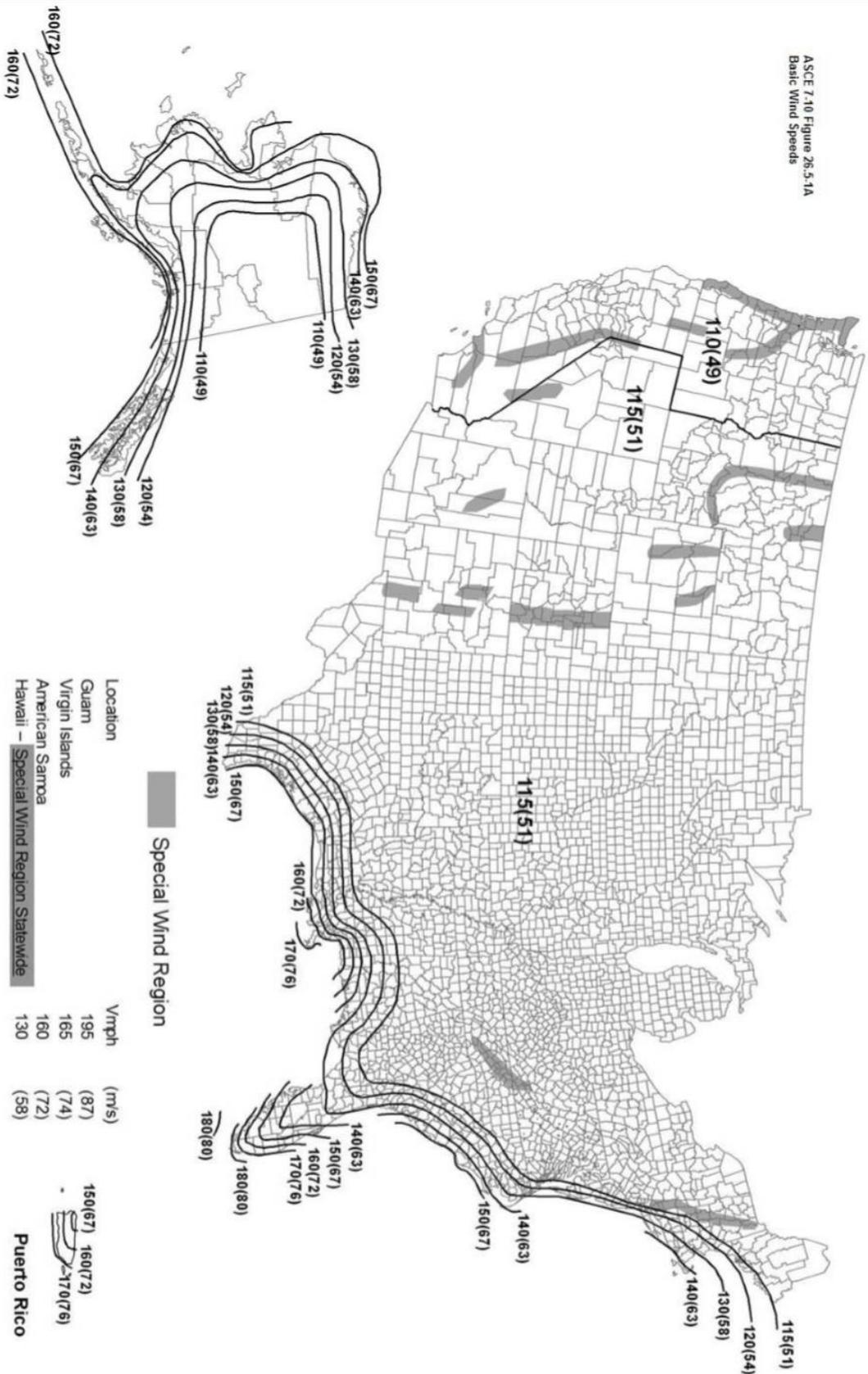


Figure 26.5.1A Basic Wind Speeds for Occupancy Category II Buildings and Other Structures.

Notes:

1. Values are nominal design 3-second gust wind speeds in miles per hour (m/s) at 33 ft (10m) above ground for Exposure C category.
2. Linear interpolation between contours is permitted.
3. Islands and coastal areas outside the last contour shall use the last wind speed contour of the coastal area.
4. Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.
5. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (Annual Exceedance Probability = 0.00143, MRI = 700 Years).